

## CLAIMS

We claim:

Claim 1. A light track fixture, comprising:

a light fixture housing, said housing having a lamp, at least one track runner, a visible light sensor, an infrared receiver, a microprocessor operably connected to memory, said memory having instructions thereon to:  
enter into a programming mode when activated by said visible light sensor;  
adjust the brightness of said lamp when said infrared receiver receives associated commands;  
store data representing said brightness of said lamp into said memory; and, recall said stored data when said infrared receiver receives associated commands.

Claim 2. The light track fixture of claim 1 in combination with a remote control unit, said remote control unit having a visible laser and an infrared transmitter.

Claim 3. The light track fixture of claim 2 wherein said remote control unit further comprises a microprocessor operably connected to said memory, said memory having stored thereon a plurality of light fixture commands.

Claim 4. The light track fixture of claim 1 wherein said light fixture housing further has a visible light programming interface wherein said visible light programming interface is activated when said light track fixture is in said programming mode.

Claim 5. The light track fixture of claim 1 further comprising a concentrating lens, said concentrating lens overlaying said visible light sensor.

Claim 6. The light track fixture of claim 5 wherein said visible light sensor is comprised of a photo diode.

Claim 7. The light track fixture of claim 1 wherein said infrared receiver has a detection angle of about 90°.

Claim 8. The light track fixture of claim 6 wherein said photo diode has a half power angle of 40°.

Claim 9. The light track fixture of claim 1 further comprising a user defined memory address stored in said memory.

Claim 10. The light track fixture of claim 1 wherein said memory further comprises a plurality of memory storage addresses for said data representing said lamp brightness.

Claim 11. The light track fixture of claim 1 wherein said at least one track runner is electrically connected to a light fixture track.

Claim 12. The light track fixture of claim 1 wherein said light fixture housing is comprised of a light fixture caddy in combination with a light track fixture, said light fixture caddy having a caddy track, said visible light sensor, said infrared receiver, said microprocessor operably connected to said memory, and a caddy track, said light track fixture electrically connected to said caddy track.

Claim 13. A track fixture luminaire, comprising:  
a housing, said housing having a lamp, a track runner, a laser sensor, an infrared receiver, lamp control electronics, a visible light programming interface, and control circuitry, said control circuitry including programmable storage memory and a microprocessor.

Claim 14. The track fixture luminaire of claim 13 wherein said memory is operably connected to said microprocessor, said memory operable to:  
enter into a programming mode when activated by said laser sensor;

adjust the brightness of said lamp using said lamp control electronics;  
store data representing said brightness of said lamp in said memory;  
recall said stored data when said infrared receiver receives commands.

Claim 15. The track fixture luminaire of claim 13 further comprising a plurality of memory storage addresses for said data representing said lamp brightness.

Claim 16. A light track fixture caddy, comprising:

a caddy track, a track runner, a laser light sensor, an infrared receiver, lamp control electronics, and control circuitry, said control circuitry having a microprocessor operably connected to storage memory.

Claim 17. The light track fixture caddy of claim 16 wherein said control circuitry is operable to adjust the power supplied to said caddy track.

Claim 18. The light fixture caddy of claim 16 wherein said memory has instructions stored thereon for control of said microprocessor, said instructions operable to: store data representing said power supplied to said caddy track in said memory; recall said stored data when said infrared receiver receives associated commands.

Claim 19. A caddy track fixture, comprising:

a visible light sensor, an infrared receiver, a caddy track, a microprocessor operably connected to storage memory, control electronics, a track runner, wherein said control electronics are operable to adjust power supplied to said caddy track, further wherein said memory has instructions stored thereon to: enter into a programming mode when activated by said visible light sensor; adjust the power to said caddy track when associated commands are received by said infrared receiver;

store data representing said power supplied to said caddy track into said memory;

and,

recall said stored data when said infrared receiver receives associated commands.

Claim 20. A programmable light fixture, comprising:

a visible light sensor, an infrared receiver, a caddy track, a microprocessor operably connected to storage memory, and control electronics, wherein said control electronics are operable to adjust power supplied to said light fixture, further wherein said memory has instructions stored thereon to:

enter into a programming mode when activated by said visible light sensor;

adjust the power to said light fixture when associated commands are received by said infrared receiver;

store data representing said power supplied to said light fixture into said memory;

store data representing angular positioning for said light fixture into said memory;

and,

recall said stored data when said infrared receiver receives associated commands.